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OF PLANT PROTECTION

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## DISCOVERIES AND CURRENT EVENTS *

### Angola: Locust Movements (*Nomadacris septemfasciata* and *Locusta migratoria migratorioides*) †

Below will be found a summary of the locust situation in the Colony during the last quarter of 1935.

Province of Luanda. During the month of October a few swarms have been seen, some of which were nearing the laying period. In November, a greater locust activity was noted in various parts of this province causing some damage to crops. In December, locust movements decreased in intensity and the damage caused was of small importance. On the 28th, the first hopper bands appeared in the circumscription of Bembe.

Province of Malange. The first laying was reported in this province on the 1st, in the locality of Forte República. During this month three swarms were noted. In November another three swarms were reported which caused some damage to crops.

Province of Bié. In October four large swarms were reported in this province, but no damage to crops.

Province of Huila. In October various swarms were reported, some of which were fairly large. In November only two swarms were observed.

Province of Benguela. In December two swarms were observed, but no damage was caused to crops.

Not reports have been received from other provinces in the Colony.

### Argentine Republic: A Serious Attack on Potato Crops by the Green Peach Aphis ††

The potato crops in the north, west and south-east of the province of Buenos Aires, have suffered recently from a serious invasion of ' pulgones ' (Aphididae). Every year there has been a more or less limited amount in the crops and for

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from Mr. JORGE DE BARROS RODRIGUES QUEIROZ, Director of the Laboratory of Plant Pathology and Entomology, Luanda, attached as expert to the Service of Locust Control, transmitted to the Institute by the Government General of the Colony.

†† Communication from the official correspondent of the Institute, Mr. JUAN B. MARCHIONATTO, Agronomical ' Ingénieur ', Director of ' Sanidad Vegetal ', Ministry of Agriculture, Buenos Aires, Argentine Republic.

this reason the pest and the damage caused by it passed un-noticed. This year, in the south-east of the province of Buenos Aires, the green peach aphis (*Myzus persicae*) totally destroyed the swedes and when the potatoes appeared, which sprouted normally, they were invaded by enormous numbers of the aphis causing the young plants to become yellow and weak.

This is the first time that its existence has been calamitous for the country.

To begin with the farmers did not understand the cause of the trouble, attributing it to the presence of insects which they called ' piojos ' or ' piojillos '.

After rain fell generally in the region on 15 December the greater part of *M. persicae* disappeared.

The damage caused by the pest was aggravated by constant and strong winds which predominated in December.

The ' white ' potato, with the exception of a few fields, proved to be so sensitive, that, in the best soil, where the best seed had been sown and which were benefited by the most abundant or opportune rains, the greater part of the crops may be considered to have definitely failed.

The variety ' chaqueña ', has again demonstrated its recognised resistance in spite of the losses suffered from the above mentioned causes.

## Brazil: Some New Records of Plant Diseases in the State of Minas Geraes *

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| *Aleurites fordii* | *Cercospora aleuritidis* Miy. |
| *Allium sativum* | *Puccinia allii* (D. and D.) Rud. |
| | *Sclerotium rolfsii* Sacc. |
| *Althaea rosea* | *Ascochyta althaeina* Sacc. and Bizz. |
| | *Cercospora althaeina* Sacc. |
| *Arracacia xanthorrhiza* | *Diplodia cacaoicola* P. Henn. |
| *Brassica rapa* | *Oidium* sp. |
| *B. pekinensis* | *Cercospora bloxami* B. and Br. |
| *Caladium* sp. | *Sclerotium rolfsii* Sacc. |
| *Cheiranthus cheiri* | *Cercospora cheiranthi* Sacc. |
| *Colocasia antiquorum* | *Sclerotium rolfsii* Sacc. |
| *Cucurbita maxima* | *Pythium de Baryanum* Hesse. |
| *Cydonia oblonga* | *Corticium salmonicolor* B. and Br. |
| *Dioscorea alata* | *Sclerotium rolfsii* Sacc. |
| *Glycine max* | *Cercospora stevensii* Young. |
| *Gossypium* sp. | *Diplodia gossypina* Atk. |
| *Ipomoea batatas* | *Pythium de Baryanum* Hesse. |
| *Lycopersicon esculentum* | *Rhizoctonia solani* Kühn. |
| | *Verticillium albo-atrum* R. and B. |
| *Manihot utilissima* | *Colletotrichum manihotis* P. Henn. |

* Communication from Mr. ALBERT S. MÜLLER, Professor of Phytopathology, Higher School of Agriculture and Veterinary Science, Viçosa, State of Minas Geraes, Brazil.

| | |
|---|---|
| *Morus alba* | *Bacterium mori* (B. and L.) E. F. S. |
| | *Cercospora moricola* Cke. |
| *Musa cavendishii* | *Stachylidium theobromae* Turc. |
| *Nerium oleander* | *Corticium salmonicolor* B. and Br. |
| *Phaseolus vulgaris* | *Pythium de Baryanum* Hesse. |
| *Prunus cerasus* | *Cercospora cerasella* Sacc. |
| *Pyrus domestica* | *C. mali* E. and R. |
| *P. malus* | *Corticium salmonicolor* B. and Br. |
| *Solanum melongenum* | *Phytophthora parasitica* Dastur. |
| *S. tuberosum* | *Sclerotium rolfsii* Sacc. |
| *Zea mays* | *Cercospora zeae-maydis* T. and D. |

**Eritrea: Locusts ***

During the month of March, 1936, no locusts have been reported in the Colony.

**India: A Serious Disease of Guava in Bombay †**

A very serious disease of *Psidium guajava* has recently broken out in Dholka in North Gujarat. The disease attacks the bark and infection spreads rapidly along the stem. The bark dries up, cracks and ultimately sheds, resulting in the death of the affected branch. In course of time infection spreads to other branches, and the tree dies. Large numbers of perithecia of the causal fungus are found scattered over the dead bark.

The disease is caused by *Physalospora psidii* Stevens and Peirce, a fungus which has not yet been reported elsewhere in India.

**Southern Rhodesia: Locust Invasion, 1932-1936 ††**

Monthly Report No. 39. February, 1936.

The locust position has been quiet on the whole during February, 1936, but the Colony is not yet free from these pests. The only species recorded has been the Red Locust (*Nomadacris septemfasciata*, Serv.).

Winged swarms were reported throughout the month, the following districts being included, namely:— Charter, Mrewa, Victoria, Chibi, Hartley, Salisbury, Mazoe, and Selukwe.

* Communication from the official correspondent of the Institute, Dr. ROLANDO GUIDOTTI, Chief of the Agricultural Bureau of Eritrea, transmitted to the Institute by the Government of the Colony.

† Communication from the official correspondent of the Institute, Mr. B. N. UPPAL, B. A., Ph. D., Plant Pathologist to Government, Bombay Presidency, Poona.

†† Communication from the official correspondent of the Institute, Mr. RUPERT W. JACK, F. E. S., Chief Entomologist, Agricultural Laboratory, Department of Agriculture, Salisbury, Southern Rhodesia.

Hoppers have appeared in the districts of Mazoe, Hartley, Salisbury and Darwin. These have been or are being destroyed.

Amongst enemies, storks have been reported in large numbers following and attacking certain swarms, whilst the fly, *Stomatorrhina lunata*, F. has been recorded attacking the eggs.

Neither parasites nor diseases of the adult locusts have been recorded. Humidity and rainfall have, in general, been above normal for the month, but were well below normal everywhere during December, 1935 and January, 1936.

## LEGISLATIVE AND ADMINISTRATIVE MEASURES

**Germany (Free State of Bremen).** — By Police Ordinance of 6 January, 1936, owners of pigeons should keep the pigeon cots closed so that the pigeons cannot get out, from 1 April to 1 June and from 15 September to 31 October. These periods are reduced to 1 to 10 April and 1 to 10 October for carrier pigeons and improved breeds of pigeons. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Februar 1936, Bd. VIII, Nr. 1, S. 17).

**Germany (Prussia).** — By Police Ordinance of 12 February, 1936, the control of Beet Leaf Bug (*Piesma quadrata*) has been made compulsory in the province of Lower Silesia. The control is compulsory for all persons cultivating, in the districts declared infested, beets and spinach. The control should be carried out according to the method of plant traps. The prescriptions correspond to those adopted by Decree of 28 January, 1935, in Anhalt [see this *Bulletin*, 1935, No. 5, p. 110].

Similar provisions have been adopted in all the districts of Prussia, Saxony and Anhalt infested by this insect during the course of the past year. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. April 1936, Bd. VIII, Nr. 2, S. 53-55).

**Germany (Saar).** — By Police Ordinance of 7 January, 1936, relative to the protection of fruit trees, the annual cleaning of these trees is prescribed. The prescriptions correspond to those adopted in Bavaria by Ministerial Ordinance of 19 January, 1934 [see this *Bulletin*, 1934, No. 4, p. 80]. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Februar 1936, Bd. VIII, Nr. 1, S. 20-22).

**Germany (Upper Silesia).** — By Ordinance of 29 January, 1936, the provisions relative to the control of wart disease of potatoes [*Synchytrium endobioticum*] in force in the district of Oppeln since 23 March, 1933 [see this *Bulletin* 1933, No. 9, p. 203] have been renewed. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin, Anfang April 1936, 16. Jahrg., Nr. 4, S. 42).

**Argentine Republic.** — By Resolution No. 420 of 10 July, 1935, the Division of ' Defensa Agrícola ' will supply the necessary collaboration with the Direction of ' Sanidad Vegetal ' for the application of the provisions contained

in the Decree No. 59.840 of 30 April, 1935, by which several species of Psittacidae are declared agricultural pests [see this *Bulletin*, 1935, No. 11, p. 251]. (*Suplemento del Boletín Oficial de la República Argentina*, Correspondiente al Boletín No. 12.481, Buenos Aires, 1 de febrero de 1936, pág. 13).

*** By Decree No. 69.595 of 25 October, 1935, the custom-house of Mendoza is authorised to introduce plant products in general, according to the Law No.4084 and with the exception of fresh fruit, potatoes, cotton seed, grape vines, Paraguay tea and sugar cane, the importation of which is regulated by special Decrees. (*Boletín Oficial de la República Argentina*, Buenos Aires, 27 de enero de 1935, año XLIV, núm. 12.476, pág. 1015).

*** The Decree No. 69.693 of 26 October, 1935, establishes that State owned barriers will be available to farmers, free of charge, who apply for them for the purpose of the protection of crops against locusts [*Schistocerca paraŋensis*], in accordance with the provisions in force and those contained in the present Decree. (*Ibid.*, pág. 1016).

*** By Decree No. 69.987 of 30 October, 1935, it is established. that as from 1 December, 1935, all fresh fruits in any quantity intended for ' rancho ' on board the steam ships at the port of Buenos Aires, will be subject to inspection carried out by the ' Oficina Sanitaria ' of importation and exportation of plants and seeds, dependent from the ' Dirección de Sanidad Vegetal ', and should comply with all the requirements established by the regulations in force in the same manner as for the exportation of fresh fruit. (*Ibid.*, pág. 1021).

*** By Decree No. 70.303 of 7 November, 1935, the machinery which has been used in the cotton industry, and which is intended for introduction into the country, should be inspected by the ' Oficina Sanitaria ' which will, when necessary, disinfect them so that they may not harbour or transport cotton boll-weevil (*Anthonomus grandis*) in any stage of development. The introduction of the said used machinery will only be permitted by the port of Buenos Aires (*Ibid.*, 29 de enero de 1936, núm. 12.478, pag. 1105).

*** By Decree No. 70.519 of 12 November, 1935. the Department of Agriculture is authorised to acquire locust eggs [*Schist. paranensis*] in infested localities. (*Ibid.*, 30 de enero de 1935, núm. 12.479, pág. 1145).

**Australia (South Australia).** — By Proclamation of 16 January, 1936 Silver Leaf of fruit trees (*Stereum purpureum*, Pers.) is declared to be a disease within the meaning of the Vine, Fruit and Vegetable Protection Acts, 1885 and 1910, and regulation for the control thereof is prescribed. (*The South Australian Government Gazette*, Adelaide, January 16, 1936, No. 3, pp. 89-90).

**Australia (Western Australia).** — By Order in Council (Agri. No. 2861/24; Ex. Co. No. 2646), issued on 18 December, 1935, the orchards situated within that part of the State which is north of the 28th parallel of south latitude and is east

of the 119th meridian of longitude shall be exempt from the provisions of the Section 7 A of ' The Plant Diseases Act, 1914-1935 ' enacting that every owner or occupier of an orchard in which one or more fruit trees or one or more fruit vines are growing shall cause such orchard to be registered at the Department of Agriculture. (*Government Gazette of Western Australia*, Perth, December 20, 1935, No. 58, p. 2411).

*** By Orden in Council (Agri. No. 2861/24; Ex. Co. 2647), issued on 18 December, 1935, the Regulations made under ' The Plant Diseases Act, 1914-1935 ', and published in the *Government Gazette* on 16 September, 1921, are amended. (*Ibid.*, pp. 2409-2411).

**Australia (New South Wales).** — The Act No. 22, 1934, assented to 6 November, 1934 and which may be cited as the ' Noxions Insects Act, 1934 ', provide for the suppression and destruction of noxious insects and for purposes connected therewith. (*1934. The Statutes of New South Wales (Public) passed during the Year 1934 with detailed Index and also alphabetical and chronological Tables and Appendix*, Sydney, 1935, pp. 292-297).

*** The Act No. 34, 1934, assented to 14 November, 1934 and which may be cited as the ' Prickly-pear (Amendment) Act, 1934 ', provides for the eradication of prickly-pear [*Opuntia*]. (*Ibid.*, op. 330-343).

*** By Regulation 49, dated 29 August, 1935, no person shall move out of any quarantine area any clover, lucerne or nursery plant or any fruit tree or vegetable on account of the presence or suspected presence of lucerne flea (*Smynthurus viridis*). (*New South Wales. Regulation. Plant Diseases Act, 1924*, [*5618*]. Sydney, 1935, 1 p.).

**Austria (Carinthia).** — The Decree of 13 November, 1935, (Zl. 46.675/1/35) contains provisions for the application of the Law of 20 February, 1932, (LGBl. No. 19) concerning the protection of crops.

Article 1 makes it compulsory to declare the appearance of certain plant and animal parasites considered to be particularly dangerous.

Article 2 contains the methods of control to be used against the different pests.

Article 3 makes it compulsory for owners who receive packages containing nursery stock originating from abroad or from a Federal Province where no official supervision of nursery stock exists, to make a declaration to that effect to the Chamber of Agriculture of Carinthia within a period of 24 hours.

Article 4 establishes a regular supervision of nurseries and undertakings trading in nursery stock.

Articles 5 and 6 concern the regular supervision to which are subjected undertakings producing recognised seeds.

Itinerant sale of nursery stock is forbidden.

The present Decree is accompanied by three appendices, the first being intended to serve as a form for the declaration to be made by owners of nurseries, the first time before 1 March, 1935 and again before 1 April of each year. The other two appendices are forms of the protocols which should be established on the occasion of the official inspection of nurseries and of the control of consignments of nursery stock introduced from abroad. (*Landesgesetzblatt für Kärnten*, Klagenfurt, 17. Jänner 1936, Jahrg. 1936, 2. Stück, S. 3-12).

**Brazil.** — On 2 January, 1936, an Agreement was concluded between the Federal Government and that of the State of Bahia, for the execution, on the territory of the said State, of public services for the purpose, *inter alia*, of the sanitary protection of cotton and other textile plants having an economic value.

Two other similar Agreements were concluded between the Federal Government and that of the States of Paraná and Alagoas on 8 and 14 January respectively. (*Diario Official*, [Rio de Janeiro], 4 de janeiro de 1936, anno LXXV, n. 3, pags. 227-228; 15 de janeiro de 1936, n. 12, pags. 1217-1218; 17 de janeiro de 1936, n. 14, pags. 1426-1427).

**Chile.** — The Decree No. 1,031 of 30 September, 1935 establishes that cotton seed and packages containing cotton seed imported into the country and originating from regions where pink bollworm (*Platyedra gossypiella*) or 'arrebiatado' (*Dysdercus* sp.) exist, should be fumigated or treated with heat before being despatched, so that the whole of the above mentioned insects which may be contained in the seed may be destroyed. This should be guaranteed by a certificate issued by the official phytopathological authority of the exporting country and endorsed by the Chilian consul of the said country.

In cases where it is determined that the seed, on arrival in the country, contains living insects, the consignment should be fumigated within 24 hours of arrival and the room in which it is carried out should be situated as near as possible to the wharf. If fumigation cannot be carried out in the place and under the above conditions, the Service of 'Sanidad Vegetal' will prohibit the disembarkation of the consignment or will have it destroyed when 24 hours have passed after disembarkation.

If the above mentioned certificate cannot be obtained the consignment should be fumigated on board before disembarkation at Chilian port for a minimum period of 12 hours. If this treatment is not efficacious a second fumigation should be carried out in a lighter or barge, and disembarkation will not be permitted as long as the consignment contains living insects.

Fumigation may be take place, provided that this is carried out in a lighter or barge, on condition that both discharge into the lighter or barge and the fumigation take place at a distance of not less than 500 metres from the shore. As in the previous case, the consignment cannot be disembarked as long as it contains living examples of pink bollworm, 'arrebiatado' or any other insect.

The above mentioned measures are not necessary for cotton seed from countries where the said insects do not exist though this seed is subject to the general

provisions of the Regulation on seed importation. In this case the phytopathological certificate which accompanies the consignment should explicitly state that neither pink bollworm nor ' arrebiatado ' exist in the region where the seed was grown.

The importation of cotton seed will only be permitted if packed in sacks that are sufficiently strong so as to resist being either torn or burst during transit or during embarkation and disembarkation. It will not be permitted to disembark torn sacks.

When it is required to import seed for sowing, authorisation should be obtained from the Service of ' Sanidad Vegetal ' which will investigate the origin of the seed which will remain at the disposal of the Service until its sanitary condition has been determined. When these conditions have been satisfied the seed will be delivered to the persons interested. (*Diario Oficial de la República de Chile*, Santiago, 18 de octubre de 1935, año LVIII, núm. 17,294, pág. 3269).

*** By Decree No. 1,055 of 10 October, 1935, the transit through Arica of fruit originating from Peru, should comply with the following requirements: —

(*a*) It should be carried out exclusively by the Arica-Tacna Railway.

(*b*) It should be transported in sealed cases so that fruit fly (*Anastrepha peruviana*) cannot escape. These cases will be provided by the above mentioned Railway.

(*c*) After leaving Tacna, the completely closed and sealed cases will not be opened until after the merchandise has been loaded in the lighters at the wharf.

(*d*) The cases are made according to a model established by the Service of ' Sanidad Vegetal ' and before use should be approved by the said Service. This approval will be renewed every fortnight.

(*e*) Two sponges should be placed in each case, soaked in an insecticid solution prepared for the Chilian Service of ' Sanidad Vegetal ' with substances provided by Railway for the purpose.

(*f*) After having been emptied and closed before leaving the wharf, the cases should be abundantly sprinkled inside with insecticides approved by the Service of ' Sanidad Vegetal '. They also will be carefully cleaned and the refuse from cleaning will be burnt. All expenses will be paid by the Arica-Tacna Railway Company. The cases may not leave the wharf without authorisation from the Inspector of ' Sanidad Vegetal '.

(*g*) On arrival at Arica, the cases will be inspected by the Service of ' Sanidad Vegetal ' and if they do not comply with the above requirements they should be returned the same day to Tacna.

For transit through Arica or Antofagasta, fruit destined for Bolivia or coming from that country, is subject to the same requirements as established in the present Decree for the transit of fruit from Tacna through Arica. (*Ibid.*, 29 de octubre de 1925, núm. 17, 303, pág. 3397).

*** By Decree No. 1,056 of the same date, the present restrictions on the products of the Department of Arica and the valleys between this Department and Taltal with regard to the provisions in force concerning fruit fly, will continue

to be applied until the Service of 'Sanidad Vegetal' of the Ministry of Agriculture officially declares that the valleys of Azapa and Codpa are free from fruit fly.

In the valleys of Azapa and Codpa it will be compulsory, twice a week, to collect and destroy all fallen fruit capable of harbouring fruit fly. (*Ibid.*).

**Belgian Congo.** — The Ordinance No. 144 bis/Agri., of 31 October, 1935, regulating the cultivation, purchase and trade of cotton in the free zones, establishes, *inter alia*, that whoever cultivates cotton or has cotton cultivated should, each year, before 1 February, for the regions South of the Equator or 1 September for regions to the North, destroy or have destroyed all cotton plants, both wild and resulting from the previous year's crop, on the lands owned by him and on unused land at least 500 metres distant from these lands.

Whoever cultivates cotton or has cotton cultivated is obliged:—

(1) To top or have topped the cotton plants, to destroy or have destroyed cotton plants, bolls and debris esisting on his land and attacked by diseases or insects determined by the Territorial Administrator and to carry out or have carried out this topping or destruction by the methods and at the times indicated by him.

(2) To uproot and destroy or have destroyed, before a date fixed annually by the Territorial Administrator, all cultivated cotton plants existing on his land.

(3) To collect and burn or have collected and burnt, before this date, all cotton bolls lying on his land.

The Territorial Administrator may always requisition without indemnification, the seed in the motor ginning factories, which is required for sowing native crops. He may also require that the seed be disinfected free of charge.

The Commissioner of the Province may order, forbid and regulate the destruction and export of cotton seed and unginned cotton.

All motor ginning factories are obliged to possess an apparatus for disinfecting the seed, approved by the Governor General. (*Bulletin Administratif du Congo Belge*, [Léopoldville-Kalina], 10 décembre 1935, 24ème année, nº 23, p. 834-837).

**Egypt** * — The Decree of 8 September, 1935, establishes the following:—

Art. 1. — The insect known as *Lonchaea aurea* is declared to be injurious to fruit trees and to bring about a state of disorder in the sense of the Article 1 of the Law No. 16 of 1916.

Art. 2. — Plants of the family Cucurbitaceae are liable to be infested with the said insect.

Art. 3. — The Sinai Peninsula is declared to be infested by this pest.

* Communication from the Ministry of Agriculture, Egypt to the International Institute of Agriculture.

Art. 4. — It is forbidden to transport by road, water-way, air or railway, or by any other means, fruits of the family Cucurbitaceae from the infested region to any other part of the Egyptian territory.

Transport may however be authorised by the Minister of Agriculture on conditions that will be specified in the authorisation itself.

**United States of America.** — Notice of Quarantine No. 45 (revised) on account of the gypsy moth (*Porthetria dispar*) and the brown-tail moth (*Nygmia phaeorrhoea*, formerly referred to as *Euproctis chrysorrhoea*) also the rules and regulations (seventh revision) supplemental to said Notice of Quarantine have been approved on 4 November, 1935 and shall be effective on the same date.

The revision of the gypsy moth and brown-tail quarantine provides for exemption of certain products by administrative instructions issued by the Chief of the Bureau of Entomology and Plant Quarantine, when in his judgment the nature of the growth or production, or the manufacture or processing of such products, is such that their interstate movement is not considered to constitute danger of spread of infestation.

The regulations have also been revised to require that persons to whom certificates are issued shall report, at the time of shipment, all consignments to points outside the regulated area. (United States Department of Agriculture. Bureau of Entomology and Plant Quarantine. *Gypsy Moth and Brown-Tail Moth Quarantine (Quarantine No. 45). Revision of Quarantine and Regulations*, [Washington], 1935, 8 pp.).

**France.** — By Ministerial Decree of 17 February, 1936, the custom-house of Thionville is open to the transit, through French territory, of living plants and parts of living plants, including fresh fruits, trees, shrubs, nursery stock, buds, and other parts of plants, under the conditions fixed by the Ministerial Decree of 24 July, 1933 [see this *Bulletin*, 1933, No. 9, p. 206]. (Ministère de l'Agriculture. Direction de l'Agriculture. *Bulletin de l'Office de Renseignements Agricoles*, Paris, 1er mars 1936, année 1936, nº 5, p. 82).

**Italy.** — The Ministerial Circular No. 104 of 24 February, 1936, concerns the use of copper salts for spring and summer treatments. (Ministero dell'Agricoltura e delle Foreste. *Bollettino Ufficiale*, Roma, 16 marzo 1936, anno VIII, n. 6, pp. 192-193).

*** By Ministerial Decree of 3 March, 1936, the control of the Oriental Peach Moth (*Cydia* [*Laspeyresia*] *molesta*) has been made compulsory in the province of Mantua. (*Ibid.*, 1 aprile 1936, n. 7, p. 244).

*** By Ministerial Decree of 5 March, 1936, the Provincial Syndicate for the improvement and development of fruit-growing in the province of Mantua has been established. (*Ibid.*).

**Kenya.** — The Government Notice No. 40 of 4 January, 1935 contains several rules concerning the importation and movement of coffee plants and coffee also the inspection from a sanitary standpoint of land where coffee is grown.

These rules shall apply to all coffee grown by non-natives.

The form of permit for the importation of coffee is appended. (*Supplement No. 3. Colony and Protectorate of Kenya. Supplement to the Official Gazette. Proclamations, Rules and Regulations* (*No. 3*), Nairobi, January 15, 1935, Vol. XXXVII, No. 3, pp. 14-21).

*** By the Government Notice No. 848 of 22 November, 1935 the provisions of the Government Notice No. 40 of 4 January, 1935 concerning the importation and movement of coffee plants and coffee shall apply to all coffee grown by natives in addition to applying to all coffee grown by non-natives. (*Supplement No. 49. Colony and Protectorate of Kenya. Supplement to the Official Gazette. Proclamations, Rules and Regulations* (*No. 45*), Nairobi, December 3, 1935, Vol. XXXVII, No. 61, p. 496).

*** By Government Notice No. 888 of 6 December, 1935 and with a view to preventing the introduction of European corn borer [*Pyrausta nubilalis*] no plant or part of any plant of the Order Gramineae (except seeds) whether intended for use as fodder or for any other purpose, shall be imported into the Colony except with the permission in writing of the Director of Agriculture. (*Supplement No. 32. Colony and Protectorate of Kenya. Supplement to the Official Gazette. Proclamations, Rules and Regulations* (*No. 47*), Nairobi, December 17, 1935, Vol. XXXVII, No. 64, p. 516).

**Morocco (French Zone).** — The Dahir of 10 December, 1935 (13 ramadan 1354) ratifies the International Convention for Plant Protection signed in Rome on 16 April, 1929 [see this *Bulletin*, 1929, No. 4, pp. 50-55] and revokes the Dahir of 3 August, 1929 (27 safar 1348) [see this *Bulletin*, 1930, No. 5, p. 75], relative to the same subject. (Empire chérifien. Protectorat de la République française au Maroc. *Bulletin Officiel*, Rabat, 10 avril 1936, XXV^e année, n° 122, p. 414).

*** The Dahir of 17 December, 1935 (20 ramadan 1354) establishes in Art. 1 that syndical associations may be formed with a view to controlling plant parasites, such as are defined in Art. 1 of the Dahir of 20 September, 1927 (23 rebia I 1346) containing regulations for the sanitary police of plants [see *International Review of Agriculture*, 1928, No. 6, p. 571], and which should be enumerated by Vizirial Decree.

The objects of these associations are principally:—

(1) The application of treatments for the destruction of plant parasites or for preventing their attack.

(2) The execution of measures established by virtue of Arts. 14, 15, 16, and the last paragraph of Art. 20 of the above mentioned Dahir of 20 September, 1927.

(3) The purchase of material and products necessary for the destruction of plant parasites.

According to Art. 2, the syndical associations are constituted either by private initiative or officially.

According to Art. 3, these associations compulsorily include, within the limit of the radius of activity of the association, all occupiers of the land, holding land under any form of ownership, on whose property there are plants liable to carry parasites mentioned in the conditions contained in Art. 1 of the present Dahir.

Art. 6-21 of this last Dahir concern the functioning, administration and financial management of the associations, the application of measures of control, the regulation of disputes and litigation concerning the constitution or functioning of the association, also the institution of an Administrative Commission of the syndical associations.

The present Dahir does not apply to the destruction of locusts which continues to be regulated by the provisions of the Dahir of 1 February, 1930 (2 ramadan 1348) [see this *Bulletin*, 1930, No. 7, p. 107]. (*Ibid.*, 14 février 1936, nº 1216, p. 166-169).

*** The Vizirial Decree of 17 December, 1935 (20 ramadan 1354) determines the measures necessary for the application of the above mentioned Dahir of 17 December, 1935. (*Ibid.*, p. 169-172).

*** Another Vizirial Decree of the same date fixes the composition of the Administrative Commission of the syndical associations for the control of plant parasites, instituted by Art. 21 of the above mentioned Dahir of 17 December, 1935. (*Ibid.*, p. 172).

*** A Decree of the Director of Waters and Forests, dated 8 January, 1936, authorises the destruction of rabbits causing great damage in a zone of the circumscription of civil control of the Beni-Snassen. (*Ibid.*, 17 janvier 1936, nº 1212, p. 65-66).

*** By Decree of the Director of Waters and Forests, dated 20 January, 1936, it is authorised to destroy wild boars causing great damage to crops in the territory of Taza. (*Ibid.*, 7 février 1936, nº 1215, p. 153).

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**Mexico.** — By ' Acuerdo ' of 17 October, 1934, all consignments of seeds, plants or parts of plants intended for planting or reproduction, on entering the country, should be accompanied by a phytosanitary certificate issued by the Plant Protection Service of the country of origin.

The certificate should certify that the seeds, plants, etc. originate from fields, gardens, etc. which are under the supervision of the Plant Protection Service. It should also certify that the consignments are free from diseases or dangerous pests and, especially, that they do not contain contageous virus and that they have been inspected by the Plant Protection Service.

The Mexican Consuls resident abroad will communicate to the Ministry of Agriculture which are the districts, in the countries to which they are accredited, that are under the supervision of the Plant Protection Service.

The Mexican Plant Protection Service will control the consignments on their arrival in the country and will issue a sanitary certificate if the result of the inspection is satisfactory.

Consignments arriving without the above mentioned certificate, will be disinfected, cleaned or returned, according to the decision of the Direction of Agriculture. Expenses incurred in these operations will be charged to the consignee. (*Deutsches Handels-Archiv*, Berlin 1936, 90. Jahrg., 1. Februarheft, S. 403).

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[For tome I, see this *Bulletin*, 1936, No. 3, p. 59. — The second tome of the present treatise contains 5 long chapters, 4 of which are devoted to insects harmful to vegetables and industrial plants, ornamental plants and flowers, polyphage insects harmful to all crops, also insects harmful to warehoused seeds and flours.

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Of the 30 chapters, into which this work is divided, the first three treat the value of shade-trees and general methods of protection from insect attack, the materials and apparatus for the control of tree and shrub insects and contains suggestions for the treatment of weakened trees.
In the following 24 chapters the writer describes the pests of the following plants:—
*Fraxinus* spp., *Sorbus* spp., *Xanthoxylum americanum*, *Fagus* spp., *Betula* spp., *Aesculus* spp., *Catalpa* spp., *Ulmus* spp., *Salisburia adiantifolia*, *Celtis* spp., *Hicoria* spp., *Larix* spp., *Tilia* spp., *Robinia pseud-acacia*, *Gleditsia triacanthos*, *Magnolia* spp., *Acer* spp., *Quercus* spp., *Pinus* spp., *Populus* spp., *Platanus* spp., *Ailanthus altissima*, *Liriodendron tulipifera*, *Nyssa sylvatica*, *Liquidambar styraciflua*, *Juglans* spp., *Salix* spp.
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## NOTES

**Official Correspondents.** — The Royal Government of Bulgaria has nominated Dr. D. ATHANASSOFF, Minister of Agriculture and State Domains, Professor of Phytopathology at the Agronomical Faculty of the University of Sofia, as official correspondent to the International Institute of Agriculture for questions relative to plant protection.

**Resolutions Adopted by the Pan-African Health Conference with Reference to the Dangers Incurred in the Use of Poisons Against Locusts.** — The Pan-African Health Conference, held at Johannesburg from 20 to 30 November, 1935, adopted, *inter alia*, the following resolution: 'The Conference recommends that investigations should be undertaken with a view to finding a method of destroying locusts which is less dangerous, both for human beings and cattle, than the use of soda arsenite '.

**The IIth International Forestry Congress.** — From 10 to 14 September, 1936, will take place at Budapest the IIth International Forestry Congress, which, *inter alia*, will discuss the diseases and pests of forest plants, also the protection of birds useful to the forest.

**Fiftieth Anniversary of the Federal Experiment Station for Vine and Fruit Trees, Lausanne, Switzerland.** — The Cantonal Viticultural Station of Lausanne, which later became the Federal Experiment Station for Vine and Fruit Trees, has celebrated its fiftieth anniversary. It was established by Decree of 24 February, 1886.

It is noteworthy that during the course of half a century of activity, this Station has devoted a considerable part of its work and research to diseases and pests of the vine, fruit trees, crop plants, vegetables, and horticultural plants, also to experimentation on the relative means of control.

Prof. ALESSANDRO BRIZI, *Segretario generale dell'Istituto, Direttore responsabile.*